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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/560,205	04/28/2000	Peter V. Boesen, M.D.	P04425US0	3361

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06/18/2003

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EXAMINER

NASSER, ROBERT L

ART UNIT

PAPER NUMBER

3736

DATE MAILED: 06/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/560,205

Applicant(s)

Boesen

Examiner

Robert Nasser

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on May 28, 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7, 10-17, and 30-35 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 10-14, 16, 17, and 30-35 is/are rejected.
- 7) ☒ Claim(s) 15 is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other: _____

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The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

Claims 1-4, 7, 10-14, 16, 17, and 35 are rejected under 35 U.S.C. 102(e) as being anticipated by Akiva. Akiva has a device including a housing, i.e. the apron, a pressure transducer on the housing, either blood pressure transducer or one of the acoustic transducers, a display for display the acoustic and other signals, where both the transducer and the housing are adapted to be worn on the patient. The examiner notes that Akiva further has a transmitter for transmitting the signals to a remote device, which inherently has a receiver and a computer to process the received signals, and a temperature sensor 19. The examiner further notes that the signal attenuates within any predetermined distance.

Claims 1-3, 5, 7, 10-12, 16, 17, and 35 are rejected under 35 U.S.C. 102(b) as being anticipated by Davis. Davis shows a wrist watch housing blood pressure sensor having a transmitter for sending the signals to a remote device with a receiver and a computer, a diaphragm transducer, and a display, where both the transducer and the housing are adapted to be worn on the patient. The examiner notes that the signal will attenuate, i.e. be reduced, over any distance.

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Claim 32 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Callahan et al.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pfohl et al in view of Thorton. Pfohl uses IR communications, which is not a broadcast signal. Also, the display does not display the output of the transducer 50. Thorton shows a similar device that uses a radio wave. Hence, it would have been obvious to modify Pfohl et al to use radio communications, as it is merely the substitution of one known equivalent for another. The examiner notes that the signal of Pfohl attenuates to a negligible amount within a predetermined distance. In addition, Thorton shows displaying a representation of all of the signals on display E to allow the physician to have more information as to the patient's condition. Hence it would have been obvious to modify Pfohl to display the output of transducer 50 on the display, to provide a more complete picture of the patient's condition to the physician. With respect to claim 3, the device of Pfohl does not have a computer connected to the receiver. However, Thorton is an example of many devices in surgery/hospital environments where the signal is broadcast to a central monitor station having a computer to allow for global viewing and monitoring. Therefore, it would have been obvious to modify Pfohl to have a computer at the receiver end, to allow for

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better monitoring of the patient's condition. With respect to claims 8 and 9, Thorton further teaches that to avoid interference in the hospital, the output power of the transmitter to must be limited to limit the range of transmission. Hence, it would have been obvious to modify the above combination to limit the range of transmission, to avoid interference. The examiner notes that the range in Thorton is disclosed as being in a hospital room, or 35-50 feet. However, the examiner notes that the exact range would have been a mere matter of design choice, depending on the size of the room.

Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akiva in view of Perin et al. Perin et al shows a acoustic sensor that is a bell for sensing body sounds. It would have been obvious to modify Akiva to use the sensor of Perin, as it is merely the substitution of one known equivalent sensor in the art.

Claims 30, 31, 33 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akiva in view of Callahan et al. Akiva does not teach the memory. Callahan teaches that it is often desirable to store signals used for acoustic monitoring of the patient for later retrieval. Hence, it would have been obvious to modify Akiva to use such a memory, so as to preserve the signals for viewing by a physician.

Claim 30 is are rejected under 35 U.S.C. 103(a) as being unpatentable over Pfohl in view of Thorton et al as applied to claims 1-17 and 35 above, and further in view of Goldenberg WO

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98/34530. The above combination does not have a memory in the housing. However, Goldenberg teaches the use of computer 16 or other embedded memory to store signals when connection is lost to the main station or for other use. Hence, it would have been obvious to modify the above combination to use such an embedded memory, to ensure data integrity.

Claims 32-34 are rejected under 35 U.S.C. 103(a) as being anticipated by Pfohl et al in view of Goldenberg WO 98/34530. Pfohl shows a device having a housing, a pressure and temperature sensor 50 (lung sounds) and 52 or 66 (heart sounds) and 72 located in the housing, and a display 36 located in the housing. The device transmits the signal using IR waves to a remote receiver 32. It does not have a memory in the housing. However, Goldenberg teaches the use of computer 16 or other embedded memory to store signals when connection is lost to the main station or for other use. Hence, it would have been obvious to modify Pfohl to use such an embedded memory, to ensure data integrity.

Claim 15 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Applicant's arguments filed 5/28/2003 have been fully considered but they are not persuasive.

Applicant has asserted that in Pfohl, the transducer and the housing are not both adapted to be placed on the patient. The examiner notes that this argument is found persuasive for the

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method claims. However, for the apparatus claims, this is an intended use limitation and is not sufficient to define over Pfohl, as the housing of Pfohl is capable of being placed on the patient.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert L. Nasser Jr. whose telephone number is (703) 308-3251. The examiner can normally be reached on Monday-Thursday and alternate Fridays from 8:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max Hindenburg, can be reached on (703) 308-3130. The fax phone number for this Group is (703) 308-0758.

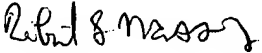
Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [max.hindenburg@uspto.gov].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0858.

RLN

June 15, 2003


ROBERT L. NASSER
PRIMARY EXAMINER